

REMARKS

The Office Action mailed January 9, 2007, has been carefully reviewed and the foregoing amendments and following remarks have been made in consequence thereof.

Claims 1-42 are pending in this application. Claims 1-42 stand rejected.

The objections to the drawings are respectfully traversed. Applicants have amended Figure 3 and the specification at Paragraphs [0028]–[0030] to address the issues raised in the Office Action. Accordingly, Applicants respectfully request that the objection to the drawings be withdrawn.

The rejection of Claims 1-42 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement is respectfully traversed.

Applicants respectfully submit that using third party data alone to perform the test and output is described in the originally filed specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The Office Action asserts that that using third party data alone to perform the test and output is not described in the specification. Applicants respectfully traverse this assertion.

Rather, Applicants submit that specification of the present application, as originally filed, including the figures, describes and supports using third party data alone to perform the test and output. For example, paragraph [0060] of the originally filed specification recites:

[t]hird Party Data Loader 510 may be used by Rule Developer 342 to collect operand values from third party databases. A custom interface to the database may be necessary. Third Party Data Loader 510 may be used to test rules within a Development Library only and one instance of third party data loader 510 may be used for each database. Third Party Data Loader 510 *may be combined* with other third party 510 or System data loaders 504 in the same test session. (Emphasis added.)

In other words, the originally filed specification supports and describes using third party data to perform the test and output, and that the third party data *may* be combined with other data

to perform the test and output. As such, the third party data need not be combined with other data to perform the test and output. In addition, there are other examples in the originally filed specification and the Figures that describe using third party data alone to perform the test and output.

For the reasons set forth above, Applicants respectfully request the Section 112 rejection of Claims 1-42 be withdrawn.

The rejection of Claims 7, 8, 22, 35, and 36 under 35 U.S.C. § 112, second paragraph, is respectfully traversed.

Claim 7 has been amended to recite “entering Rule Set information into an enterprise database.” Applicants submit that Claim 7, as amended, satisfies the requirements of Section 112.

Claim 8 has been amended to recite “checking an enterprise database for an existing copy of the imported Rule Set.” Applicants submit that Claim 8, as amended, satisfies the requirements of Section 112.

Claim 22 has been amended to recite “check said database for an existing copy of said imported Rule Set.” Applicants submit that Claim 22, as amended, satisfies the requirements of Section 112.

Claim 35 has been amended to recite “enters Rule Set information into an enterprise database.” Applicants submit that Claim 35, as amended, satisfies the requirements of Section 112.

Claim 36 has been amended to recite “checks an enterprise database for an existing copy of said imported Rule Set.” Applicants submit that Claim 36, as amended, satisfies the requirements of Section 112.

Accordingly, for at least the reasons set forth above, Applicants respectfully request that the Section 112, second paragraph, rejection of Claims 7, 8, 22, 35, and 36 be withdrawn.

The rejection of Claims 1-42 under 35 U.S.C. § 101 as being directed to non-statutory subject matter is respectfully traversed.

The Office Action asserts at page 4 that “the claims merely display or monitor a tested generated rule and are therefore mathematical results without practical application. And thus does not impart any functionality.” Applicants respectfully traverse this assertion, and submit that the claims of the present patent application are directed to practical applications in the technological arts. “Any sequence of operational steps can constitute a process within the meaning of the Patent Act so long as it is part of the technological arts.” In re Musgrave, 431 F.2d 882 (C.C.P.A. 1970). Computers should be considered within the technological arts for the purposes of § 101, regardless of the uses to which they are put. In re Benson, 169 USPQ 548 (CCPA 1971). Nonetheless, in order to expedite prosecution, Applicants have amended Claims 1, 15, and 29.

More specifically, independent Claim 1 has been amended to recite a “computer-implemented method of managing a machinery monitoring system” that includes the step of “outputting a test result.” Applicants respectfully submit that a computer-implemented method that includes outputting a test result is a useful process that is considered to be within “the technological arts”. Accordingly, Claim 1 is respectfully submitted to satisfy the requirements of 35 U.S.C. § 101.

Claims 2-14 depend from independent Claim 1. When the recitations of Claims 2-14 are considered in combination with the recitations of Claim 1, Applicants submit that Claims 2-14 likewise satisfy the requirements of Section 101.

Claim 15 has been amended to recite a “computer-implemented machinery monitoring system for a plant” where the system includes a processor programmed to “display incremental results of said test . . . and output a test result.” Applicants respectfully submit that a computer-implemented system including a processor programmed to display and output a test result is a useful process that is considered to be within “the technological arts”. Accordingly, Claim 15 is respectfully submitted to satisfy the requirements of 35 U.S.C. § 101.

Claims 16-28 depend from independent Claim 15. When the recitations of Claims 16-28 are considered in combination with the recitations of Claim 15, Applicants submit that Claims 16-28 likewise satisfy the requirements of Section 101

Claim 29 has been amended to recite a “computer program embodied on a computer readable medium for managing a machinery monitoring system” where the program includes a code segment that “displays incremental results of said test . . . and outputs said results of said test.” Applicants respectfully submit that a computer system including a program that includes code that displays and outputs results of a test is a useful process that is considered to be within “the technological arts”. Accordingly, Claim 29 is respectfully submitted to satisfy the requirements of 35 U.S.C. § 101.

Claims 30-42 depend from independent Claim 29. When the recitations of Claims 30-42 are considered in combination with the recitations of Claim 29, Applicants submit that Claims 30-42 likewise satisfy the requirements of Section 101.

For at least the reasons set forth above, Applicants respectfully request that the Section 101 rejection of Claims 1-42 be withdrawn.

The rejection of Claims 1-42 under 35 U.S.C. § 102(e) as being anticipated by Bahrs et al. (U.S. Patent No. 6,654,932) (“Bahrs”) is respectfully traversed.

Bahrs describes a method for validating user input. The method is implemented on a distributed data processing system (100). “Uses” cases describing functions of an application that are most reused, for example, a ViewController that uses a ValidationRule, are developed by first identifying the actors in the system. A particular business validation rule is selected (step 3200), and a class that extends the ValidationRule is created (step 3203). The ValidationRule may edit and/or normalize (steps 3204 and/or 3206) user-inputted data. A edit() method takes user-inputted data and generates a formatted output for display. A normalize() method takes user-inputted or formatted data and generates a normalized output for transmitting to storage (step 3206). The ValidationRule compares the user-inputted data against the selected business rule (step 3208) to validate the user-inputted data. If the user-inputted data is not valid, a ValidationRuleException is performed (step 3210), and the method terminates. If the data is valid, the method terminates. Notably, Bahrs does not describe nor suggest testing at least one rule incrementally using selected asset data. Rather, Bahrs describes selecting a validation rule to test user-inputted data.

Claim 1 recites a computer-implemented method of managing a machinery monitoring system, the method comprising “relating an asset output to at least one asset input

. . . generating at least one rule based on the relation . . . selecting at least one of live asset data, historical asset data, user-supplied asset data, and third party supplied asset data to test the at least one rule . . . testing the at least one rule incrementally using the selected asset data . . . monitoring the output of the at least one rule at each increment . . . and outputting a test result.”

Bahrs does not describe nor suggest a computer-implemented method of managing a machinery monitoring system as is recited in Claim 1. Specifically, Bahrs does not describe nor suggest a method that includes testing at least one rule incrementally using selected asset data. Rather, Bahrs describes testing user-inputted data using only a selected validation rule.

Furthermore, Bahrs does not describe nor suggest a method that includes selecting at least one of live asset data, historical asset data, user-supplied asset data, and third party supplied asset data to test at least one rule. Rather, Bahrs describes selecting a validation rule to test user-inputted data.

Moreover, Bahrs does not describe nor suggest a method that includes generating at least one rule based on the relation. Rather, Bahrs describes selecting a validation rule based on user-inputted data. Accordingly, for at least the reasons set forth above, Claim 1 is submitted to be patentable over Bahrs.

Claims 2-14 depend from independent Claim 1. When the recitations of Claims 2-14 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2-14 likewise are patentable over Bahrs.

Claim 15 recites a computer-implemented machinery monitoring system for a plant, the system comprising “a database for storing Rule Sets, wherein the Rule Sets include at least one rule expressed as a relational expression of a real-time data output relative to a real-time data input, wherein the relational expression is specific to a plant asset . . . and a processor programmed to control said machinery monitoring system to, said processor programmed to . . . prompt a user for a security control password . . . generate a plant asset operational rule from an application expert . . . test said rule based on at least one of live asset data, historical asset data, user-supplied asset data, and third party supplied data . . . display incremental results of said test . . . and output a test result.”

Bahrs does not describe nor suggest a computer-implemented machinery monitoring system for a plant as is recited in Claim 15. Specifically, Bahrs does not describe nor suggest a system that includes a processor programmed to test a rule based on at least one of live asset data, historical asset data, user-supplied asset data, and third party supplied data. Rather, Bahrs describes testing user-inputted data using only a selected validation rule.

Furthermore, Bahrs does not describe nor suggest a system that includes a processor programmed to generate a plant asset operational rule from an application expert. Rather, Bahrs describes selecting a validation rule based on user-inputted data.

Moreover, Bahrs does not describe nor suggest a system that includes Rule Sets that include at least one rule expressed as a relational expression of a real-time data output relative to a real-time data input, wherein the relational expression is specific to a plant asset. Rather, Bahrs describes business validation rules that edit and/or normalize user-inputted data. Accordingly, for at least the reasons set forth above, Claim 15 is submitted to be patentable over Bahrs.

Claims 16-28 depend from independent Claim 15. When the recitations of Claims 16-28 are considered in combination with the recitations of Claim 15, Applicants submit that dependent Claims 16-28 likewise are patentable over Bahrs.

Claim 29 recites a computer program embodied on a computer readable medium for managing a machinery monitoring system using a server system coupled to a client system and a database, the client system including a user interface, the program comprising a code segment that prompts a user for a security control password and then "generates a plant asset operational rule from an application expert . . . tests said rule based on at least one of live asset data, historical asset data, user-supplied asset data, and third party supplied data . . . displays incremental results of said test . . . and outputs said results of said test."

Bahrs does not describe nor suggest a computer program embodied on a computer readable medium for managing a machinery monitoring system as is recited in Claim 29. Specifically, Bahrs does not describe nor suggest a computer program that tests a rule based on at least one of live asset data, historical asset data, user-supplied asset data, and third party supplied data. Rather, Bahrs describes testing user-inputted data using only a selected validation rule.

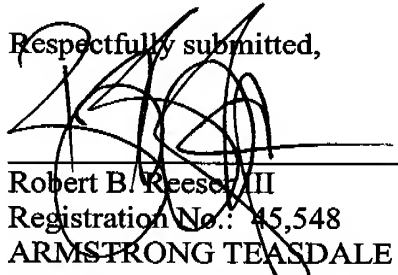
Furthermore, Bahrs does not describe nor suggest a computer program that generates a plant asset operational rule from an application expert. Rather, Bahrs describes selecting a validation rule based on user-inputted data. Accordingly, for at least the reasons set forth above, Claim 29 is submitted to be patentable over Bahrs.

Claims 30-42 depend from independent Claim 29. When the recitations of Claims 30-42 are considered in combination with the recitations of Claim 29, Applicants submit that dependent Claims 30-42 likewise are patentable over Bahrs.

For the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1-42 be withdrawn.

In view of the foregoing amendment and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully submitted,



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METHODS AND SYSTEMS FOR MONITORING
AND DIAGNOSING MACHINERY

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MARKED-UP ANNOTATED SHEET

